



March 30, 2022  
 Public Service Commission  
 P.O. Box 7854  
 Madison, WI 53707-7854  
 Re: Quadrennial Planning Process IV, Docket No. 5-FE-104

On behalf of RMI, we respectfully submit these comments in Docket No. 5-FE-104.

**About RMI:** RMI (formerly Rocky Mountain Institute) is an independent, non-partisan, non-profit organization whose mission is to transform the global energy system to secure a clean, prosperous, zero-carbon future for all. Since our founding in 1982, we have grown to over 500 staff working on four continents with a global reach. Our initiatives include researching the business models, policies, technologies, and financing mechanisms necessary to advance an equitable clean energy transition.

**Introduction & Summary:** In the “Quadrennial Planning Process” section of the Phase One Memo, the Commission indicated that an update to Focus on Energy (‘Focus’) program offerings is needed and consistent with the public interest.<sup>1</sup> As the Commission investigates the macro policies and priorities outlined in Phase 1 of the Quadrennial Planning IV proceeding, it can take steps towards modernizing Focus by bringing the program into alignment with the Governor’s climate commitments and prioritizing efficient, electric appliances. Focus can further strengthen its offerings through utility demand response collaboration and the deployment of more wholistic and accessible income-qualified offerings. In summary, RMI recommends that the Commission adopt the following alternatives because they will benefit Wisconsin residents and Focus’ customer class:

- A. Issue 1, Alternative 1:** Prioritize cost-effective emission reductions program offerings.
- B. Issue 2a, Alternative 1:** Support beneficial electrification by allowing unregulated fuels to electric fuel switching.
- C. Issue 2b, Alternative 1:** Expand beneficial electrification offerings.
- D. Issue 4, Alternative 1:** Expand collaboration with utility demand response programs.
- E. Issue 5, Alternative 2:** Collaborate with the Department of Administration (DOA) to fill gaps in income-qualified offerings.

Action on these issues will ensure Focus on Energy is serving its participating customers effectively while delivering long-term economic and societal benefits to the state.

### **Phase 1: Macro Policies and Priorities:**

- A. Alignment of Focus on Energy performance goals and program offerings with decarbonization goals: Alternative 1, Sub-Alternative A**

**Alternative 1, “prioritize cost-effective emission reduction program offerings”, is the option most aligned with the Governor’s climate priorities and Wisconsin legislation, including Focus statute.** Focus on Energy’s statute explicitly directs it to “achieve environmentally sound and adequate energy supplies at reasonable cost.”<sup>2</sup> The Focus statute is consistent with other state laws such as the Energy

<sup>1</sup> <https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=432286>

<sup>2</sup> Under Wis. Stat. § 196.374(2)(a).2., the purpose of the Focus program is “to help achieve environmentally sound and adequate energy supplies at reasonable cost.” Wisconsin Stat. § 196.374(3)(b)1. states that the Commission’s priorities for the statewide program should include “avoid[ing] adverse environmental impacts from the use of energy” alongside priorities to moderate the growth in electric and natural gas demand and usage, facilitate markets and assist market providers to achieve higher levels of energy efficiency, promote energy reliability and adequacy, and promote rural economic development.

Priority Law (EPL) that prioritize environmentally sound practices. The EPL mandates that the state prioritize efficient, non-combustible, and affordable energy sources with the goal of “reduc[ing] the environmental effects of energy systems powered by carbon-based power-systems.”<sup>3</sup> Both the Focus statute and the EPL suggest Focus on Energy provide a basis for prioritizing cost effective, environmentally sound solutions. Historically, Focus has prioritized energy savings metrics as a strategy for ensuring environmentally sound solutions required by Wisconsin laws. However, given the state-wide concern for climate change, the increasingly renewable electric grid, and advancements in electric appliance technology, Focus should now prioritize greenhouse gas emission reductions as a key strategy for providing environmentally sound and cost-effective energy supply. Doing so will enable Focus to prioritize interventions that provide a broader range of benefits to participating customers that may not have been prioritized under the traditional fuel-specific reduction approach. For example, replacing a gas water heater with an electric heat pump alternative increases electric energy consumption but reduces lifetime carbon emissions while delivering additional health benefits through improved air quality. Prioritizing carbon emissions is consistent with the public interest and will deliver health and climate benefits to Focus customers and the state broadly:

- **Modernize the Program.** Prioritizing carbon emissions will modernize the program and ensure it is best designed to meet the needs of Wisconsinites. This is the right moment to do so since many current program offerings will leave Focus falling short of its energy saving goals. For example, the 2021 Focus Potential Study finds that residential lighting potential is substantially lower than previously estimated in the 2017 potential study as the market becomes saturated.<sup>4</sup> This demonstrates the need for more modern program offerings. Energy savings from these “low-hanging fruit” energy efficiency interventions are plateauing after decades of successful market penetration from the Focus program. However, prioritizing emissions reduction could enable a new set of program offerings that meet decarbonization and efficiency priorities, such as heat pump incentives as recommended in the 2021 heat pump report prepared for Focus.<sup>5</sup>
- **Mitigate Emissions and Negative Societal Outcomes.** Current Focus offerings incentivize fossil fuel appliances that, while more energy efficient than many of the appliance offerings available on the market, contribute direct greenhouse gas emissions for the lifetime of the equipment. In 2020, Focus provided \$2.9 million in rebates to residential combusting furnaces, the greatest recipient of residential rebates.<sup>6</sup> However, gas furnaces installed in 2022 are projected to emit 23% more emissions per unit of energy in Wisconsin than heat pumps over the lifetime of the appliance.<sup>7</sup>

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<sup>3</sup> <https://docs.legis.wisconsin.gov/1993/related/acts/414>

<sup>4</sup> [https://focusonenergy.com/sites/default/files/inline-files/Potential\\_Study\\_Report-FoE\\_Efficiency-2021.pdf](https://focusonenergy.com/sites/default/files/inline-files/Potential_Study_Report-FoE_Efficiency-2021.pdf)

<sup>5</sup> [https://www.focusonenergy.com/sites/default/files/inline-files/2021/EERD\\_ASHF\\_Project-Final\\_Report.pdf](https://www.focusonenergy.com/sites/default/files/inline-files/2021/EERD_ASHF_Project-Final_Report.pdf)

<sup>6</sup> [https://focusonenergy.com/sites/default/files/inline-files/Evaluation\\_Report-2020-Volume\\_I.pdf](https://focusonenergy.com/sites/default/files/inline-files/Evaluation_Report-2020-Volume_I.pdf)

<sup>7</sup> RMI calculated emissions per unit of heating energy by multiplying the appliance efficiency by the emission intensity of the fuel source. Emission intensity for methane (natural gas) was retrieved from Energy Information Administration estimates. Electricity emission intensity was retrieved from the National Renewable Energy Laboratory’s standard scenario analysis for Wisconsin. To calculate electricity emissions intensity for the 15-year lifetime of the heat pump, we used estimates of the average emission intensity between 2022 and 2036 assuming Wisconsin reaches 95% carbon-free electricity by 2050. Given the uncertainty about the future renewable penetration in Wisconsin, we used a conservative scenario that assumes Wisconsin will have gas powerplants online until 2040 which does not align with current state climate goals. We compared heat pumps to high performing gas appliances with an assumed 95% efficiency. The heat pump modeled is a cold-climate heat pump with a coefficient of performance of 2.9. This value is the minimum heat pump COP listed on the residential Focus on Energy rebate webpage. This analysis uses similar methods to RMI’s “It’s time to incentivize heat pumps” blog, linked below.

[https://www.eia.gov/environment/emissions/co2\\_vol\\_mass.php](https://www.eia.gov/environment/emissions/co2_vol_mass.php)

<https://scenarioviewer.nrel.gov/>

<https://rmi.org/its-time-to-incentivize-residential-heat-pumps/>

Emission savings will be even greater if heat pumps with greater efficiencies than the Focus listed minimum are installed and if Wisconsin aligns with Governor Evers's carbon-free electricity goals, outpacing the conservative renewable adoption projections used in this analysis. Addressing these sources of emissions in this Quadrennial Planning Process is critical for addressing Wisconsin's climate concerns. Since appliances often operate for 15 years or more, customers will only buy one or two more appliance replacements before 2050. Focus must prioritize decarbonization now to ensure the program is aligned with the Governor's long-term climate goals and to build a market for the lowest-carbon appliance options. If Focus can reduce climate emissions, the state will have healthier, more resilient communities as it embarks on the path toward greater energy security, a crucial goal now more than ever.

Shifting the program to prioritize emissions reduction is a realistic and manageable switch. **Pursuing Sub-Alternative A, "establishing a facilitated stakeholder working group to develop recommendations for how Focus can align with decarbonization goals," will make the transition manageable by allowing for informed decision making when identifying barriers and solutions.** To ensure this working group enables equitable engagement, the PSC should:

- **Invite a diverse group of stakeholders.** These stakeholders should include climate organizations and organizations representing energy burdened populations.
- **Define consensus.** The PSC should set clear guidelines on how the group is meant to come to consensus and address conflict.
- **Set clear timeline and next steps.** The PSC should set a clear timeline for the recommendations and next steps on how these recommendations will lead to decision making.
- **Establish clear priorities.** Working group priorities should include how Focus can align with the Administration's climate goals and how the offerings must change to meet these goals.

Other states have already begun prioritizing greenhouse gas emissions over traditional energy efficiency goals. Minnesota and Illinois recently raised energy efficiency targets and explicitly allowed fuel switching to encourage decarbonization.<sup>8</sup> Other cold weather states, like Vermont and Massachusetts, have set greenhouse gas reduction goals that programs must meet in conjunction with energy reduction goals. The working group should evaluate the successes and strategies of other cold climate energy programs to identify lessons learned and key policy avenues.

The American Council for an Energy-Efficient Economy's (ACEEE) Roadmap for Climate-Forward Efficiency report offers a helpful framework of near-term strategies for transitioning to decarbonization priorities with three recommendations: reform cost-effectiveness tests, analyze the role of gas appliances, and redefine energy efficiency savings.<sup>9</sup> While the working group is underway, Focus can take a first step in addressing these recommendations by properly capturing societal benefits in the cost-effectiveness test by aligning with federal guidelines. Currently, Wisconsin uses a \$15/ton carbon value. This should be adjusted to \$50/ton to match the federal guidelines.<sup>10</sup> Thirteen states are already using at least \$50/ton CO<sub>2</sub> in their policy proceedings.<sup>11</sup> Increasing the value of carbon is a clear signal that the program prioritizes emission reductions.

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<sup>8</sup> <https://www.aceee.org/sites/default/files/pdfs/u2202.pdf>

<sup>9</sup> <https://www.aceee.org/sites/default/files/pdfs/u2202.pdf>

<sup>10</sup> [https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument\\_SocialCostofCarbonMethaneNitrousOxide.pdf](https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf)

<sup>11</sup> <https://costofcarbon.org/states>

## **B. Fuel Switching from Unregulated Fuels: Alternative 1**

**Alternative 1, “allowing Focus to claim unregulated fuel savings”, is the option most aligned with current Focus statute and will deliver the most cost and climate benefits to the Focus on Energy program and its participants.** A priority of the Focus statute is to reduce state energy use and infrastructure investments through cost-effective building investments. Incentivizing households to fuel switch from delivered fuels, like propane, to efficient electric appliances, like air source heat pumps, will reduce overall energy use and propane infrastructure investments, such as piping, trucks, and storage. Cold climate air source heat pumps are more efficient than propane furnaces with seasonal Coefficient of Performance (COP) values<sup>12</sup> often higher than 2 compared to propane efficiencies peaking near 90%. These high energy savings and the high cost of propane will lead to lower utility bills for fuel switching participants. In Wisconsin, customers who switch from delivered fuels (like propane or heating oil) to electric heat pumps can save on average \$384 annually on their utility bills while reducing climate emissions and improving indoor and outdoor air quality.<sup>13</sup> This alternative will also allow for underrepresented Focus customers, like rural customers who depend on unregulated fuels, to access the program offerings. Finally, fuel switching will also benefit existing Focus customers. Electrifying delivered fuel customers will increase the Focus budget because fuel switching customers will contribute more into Focus through their increased electricity bill. The entire Focus customer class will benefit from the increase in program budget from increased participation of customers who were served by unregulated fuels. Additionally, existing Focus participants will experience the societal benefits of reduced climate impacts and improved community health from fuel switching. Alongside carbon emissions, propane appliances emit harmful pollutants like carbon monoxide, formaldehyde and other harmful pollutants into the air, which can be toxic to people.

Furthermore, Wisconsin Focus participants will benefit from the heat pump market development of fuel switching customers. Other established cold climate energy efficiency programs, such as Efficiency Maine, Efficiency Vermont, and MassSaves, have grown the market for efficient heat pumps by targeting delivered fuel customers in their programs. For example, Efficiency Maine has grown the local heat pump market by incentivizing over 60,000 high performance heat pumps displacing heating oil and propane appliances over 8 years.<sup>14</sup> Maine saw heat pump sales grow by 25-30% and space heating cut greenhouse emissions by 60% for every BTU produced illustrating that fuel switching is an effective tool for developing the electrification market.

To successfully implement Alternative 1, we recommend the Commission consider the following:

- 1. Establish workforce training for propane to electric retrofits.** The 2021 heat pump report prepared for Focus identified a need for an increased workforce qualified to retrofit heat pumps.<sup>15</sup> Delivering this service through Focus’ training outlets will ensure Alternative 1 will be successful. These services should be targeted in the northern and western regions of Wisconsin where the most propane customers reside.<sup>16</sup>

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<sup>12</sup> The coefficient of performance (COP) is a ratio of useful heating or cooling provided versus energy consumed. For example, a heat pump with a COP of 2 will deliver 2 kWh of heating to the home for every 1 kWh of energy required to deliver that heat.

<sup>13</sup> <https://map.rewiringamerica.org/states/wisconsin-wi> -Wisconsinites save on average \$384 when switching from a propane or fuel oil furnace and water heater to an air source heat pump and heat pump water heater.

<sup>14</sup> <https://www.efficiencymaine.com/how-the-efficiency-maine-trust-is-saving-consumers-and-businesses-billions/>

<sup>15</sup> [https://www.focusonenergy.com/sites/default/files/inline-files/2021/EERD\\_ASHP\\_Project-Final\\_Report.pdf](https://www.focusonenergy.com/sites/default/files/inline-files/2021/EERD_ASHP_Project-Final_Report.pdf)

<sup>16</sup> <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=044e6d58b4f045bf9059c9ba0a76d059b>

2. **Engage in education and communication efforts with propane customers.** To ensure high participation in heat pump programs, targeted customer and contractor education is critical. Initial communication efforts could target households who have previously participated in weatherization and onsite solar programs as they will see even greater cost benefits from fuel switching to efficient electric heating.

### C. Emphasis on Electrification Programs and Offerings: Alternative 1

**Alternative 1, “expanding beneficial electrification programming”, aligns the best with Focus’ existing energy efficiency priorities and potential future carbon emission reduction priorities.** Prioritizing beneficial electrification aligns with the public interest and benefits both Focus customers and the state:

- **Electrification Reduces Gas Infrastructure Investments:** Despite gas consumption in Wisconsin remaining relatively flat, the state continues to invest in and expand gas infrastructure.<sup>17</sup> The 2019-2021 Biennial PSC report, for example, outlines WEPCO’s \$186 million gas line extension and repair project. Other recent gas infrastructure investments include the recently approved \$370 million gas storage site.<sup>18</sup> Full electrification will mitigate the need for increased costly gas infrastructure by switching fossil fuel-reliant appliances with electric alternatives like heat pumps. In the near-term, these gas infrastructure savings from full electrification of buildings can come without the need for large investments in the electric grid. Although full electrification can help reduce expensive gas infrastructure, high penetration of electric heating will impact electric infrastructure needs. The Wisconsin Peak Period Analysis report prepared for Focus on Energy by Cadmus finds the Wisconsin grid currently peaks in the summer (between June and September).<sup>19</sup> The grid peaks again in the winter (between December and February); however, it uses about 10% less electricity than the summer peak. This indicates there is near-term capacity for increased electric space heating (from electric heat pumps) without major electric grid expansion. Despite the lack of near-term impacts to the electric grid, it is important for the PSC to begin to plan for the impact of high penetration of electric heating. To mitigate extreme winter peaking of the electric grid, cold climate heat pumps can be paired with weatherization and demand response measures.
- **Electrification Facilitates Decarbonization:** Electrification is a tool for the Commission to start aligning with decarbonization priorities, as addressed in Issue 1. Between 2015 and 2019, Wisconsin increased renewable energy consumption in the electric power sector by 15%.<sup>20</sup> We expect this pace to quicken given the Governor’s 2050 carbon-free electricity goal and the 2,800MW of solar and wind projects under construction in the state.<sup>21</sup> However, internal RMI analysis finds that Wisconsin residents do not have to wait for the grid to have more renewables to benefit from efficient electric technology. As illustrated in Figure 1, a Focus incentivized air source heat pump produces 23% fewer emissions per unit of heating delivered over an assumed 15-year

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<sup>17</sup> <https://rmi.org/insight/the-impact-of-fossil-fuels-in-buildings/>

<sup>18</sup> [https://madison.com/news/local/environment/regulators-approve-370m-natural-gas-storage-project-despite-concerns-of-fossil-fuel-investment/article\\_024bd604-9586-5620-ad58-4fdad99e526f.html](https://madison.com/news/local/environment/regulators-approve-370m-natural-gas-storage-project-despite-concerns-of-fossil-fuel-investment/article_024bd604-9586-5620-ad58-4fdad99e526f.html)

<sup>19</sup> [https://www.focusonenergy.com/sites/default/files/inline-files/Potential\\_Study-Research-Peak\\_Period.pdf](https://www.focusonenergy.com/sites/default/files/inline-files/Potential_Study-Research-Peak_Period.pdf)

<sup>20</sup> [https://www.eia.gov/state/seds/sep\\_use/eu/pdf/use\\_eu\\_WI.pdf](https://www.eia.gov/state/seds/sep_use/eu/pdf/use_eu_WI.pdf)

<sup>21</sup> <https://www.renewwisconsin.org/project/large-scale-solar-and-wind/>

appliance lifespan than a 95% AFUE gas furnace and 38% fewer emissions than a 90% AFUE propane furnace.<sup>22</sup>

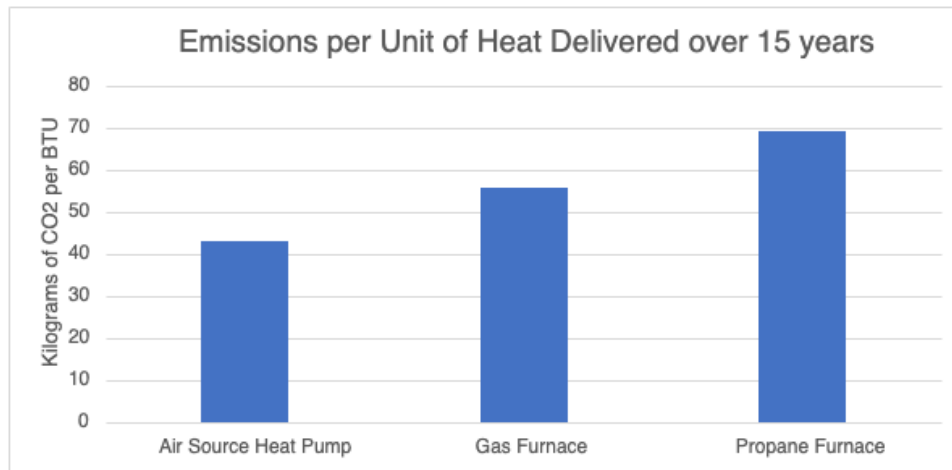


Figure 1: The emissions per unit of delivered heat for an air source heat pump, gas furnace, and propane furnace over a 15-year lifetime of the appliance.

- Improves Health Outcomes:** Appliance electrification is also a key tool to improve Wisconsin's health outcomes. Outdoor air pollution leads to increased risk of heart and lung disease, like asthma, which expedites premature deaths in Wisconsin. In 2017, outdoor air pollution from burning fuels in buildings led to \$5.2 billion in health costs from premature deaths in Wisconsin.<sup>23</sup> This figure is an underestimate and does not account for health impacts from exposure to indoor air pollution, direct exposure to other outdoor pollutants such as ozone or NO<sub>x</sub>, or other health burdens like asthma or emergency room visits. Electrification offerings can serve to reduce these negative health outcomes in a cost-effective manner.

The Commission has already established air source heat pumps as a crucial component of future Focus programming. Center for Environment and Energy and Elevate published a report for Focus on Energy in 2021 which stated that air source heat pump offerings will need to dramatically expand in the coming years to meet current and future energy saving goals. The report further identified heat pumps as a critical element of the Focus portfolio to meet current and future energy savings goals.<sup>24</sup> Specifically, this report called out air conditioning, propane, and electric resistance customers as key targets for heat pump retrofits. As the report describes, this customer class has immediate financial saving opportunities and should be prioritized when considering beneficial electrification offerings.

To effectively expand beneficial electrification offerings as outlined in Alternative 1, we recommend the PSC considers the following:

<sup>22</sup> RMI extended the analysis explained in Footnote 7 to include propane furnaces. Again, RMI calculated emissions per unit of heating energy by multiplying the appliance efficiency by the emission intensity of the fuel source. The emission intensity of methane (natural gas) and electricity as well as the efficiency values for those appliances match the methods outlined in Footnote 7. We compared heat pumps to high performing propane appliances with an assumed 90% efficiency.

[https://www.eia.gov/environment/emissions/co2\\_vol\\_mass.php](https://www.eia.gov/environment/emissions/co2_vol_mass.php)

<http://www.energy.gov/energysaver/furnaces-and-boilers>

<sup>23</sup> <https://rmi.org/health-air-quality-impacts-of-buildings-emissions/>

<sup>24</sup> [https://www.focusonenergy.com/sites/default/files/inline-files/2021/EERD\\_ASHP\\_Project-Final\\_Report.pdf](https://www.focusonenergy.com/sites/default/files/inline-files/2021/EERD_ASHP_Project-Final_Report.pdf)

1. **Increase existing heat pump incentives by aligning with decarbonization priorities.** Increasing incentives for electric appliances will grow the heat pump market while also helping Focus meet future energy efficiency and decarbonization goals. Other cold climate programs, like Efficiency Maine and Mass Saves, have incentives greater than \$1,000 which is over three times the existing Focus heat pump incentives.<sup>25 26</sup> To appropriately set the right level of incentives, Focus should prioritize incentives for appliances based on long-term emissions reduction. This will allow Focus to effectively use its budget while investing in long-term solutions.
2. **Incentivize cold climate heat pumps.** Wisconsin's cold climate necessitates high performance heat pumps. Doing so will ensure customer satisfaction while avoiding unnecessary strain on the electrical grid. Focus should set clear market indicators by incentivizing cold climate heat pumps over other less efficient appliance offerings. As suggested in the Focus heat pump report, the program could implement tiered cold climate heat pump incentives to support these high-performance technologies. When looking for resources, Focus can look to the Northeast Energy Efficiency Partnerships (NEEP) Cold Climate Air Source Heat Pump database, which currently contains thousands of tested and rated cold-climate commercial and residential air source heat pump products from dozens of manufacturers, available within the United States.<sup>19</sup>
3. **Use Focus as a market transformation program for efficient electric technologies.** Focus on Energy can be used as a market energizer much like it has been for gas appliances in the past. Focus can aid these efforts through targeted efforts to increase participation in heat pump programs. In other cold-weather states, mid-stream incentives paired with contractor and customer education around heat pumps has increased program engagement and heat pump adoption<sup>27</sup>
4. **Geothermal heat pump pilots:** As Focus begins to expand heat pump offerings, it should not lose sight of other technologies that may play an important role in meeting Wisconsin's heating needs, such as geothermal heat pumps. Geothermal heat pumps are an efficient technology that is highly effective in cold climates like Wisconsin.<sup>28</sup> Despite the benefits of geothermal heating, this technology has historically been criticized for being too expensive and lacking installation and manufacturing labor.<sup>29</sup> However new innovators, like Dandelion Energy and Darcy Solutions, are addressing these concerns by improving the technology, industrializing the process, and bringing down the price making now the ideal time for Focus to launch geothermal pilots.<sup>30 31</sup> Targeted pilots for geothermal heat pumps could help Focus understand the cost of this technology, their effectiveness in a cold climate state, and what programs like Focus can do to increase the scalability of this technology in Wisconsin.

Finally, we applaud the Commission for considering electric vehicle offerings in this docket. We support further exploration of how Focus can play a role in this important energy transition. It will be important for the PSC to ensure electric vehicle incentives are delivered alongside demand response services.

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<sup>25</sup> <https://www.masssave.com/saving/residential-rebates/heat-pump>

<sup>26</sup> <https://www.efficiencymaine.com/at-home/ductless-heat-pumps/>

<sup>27</sup> <https://www.aceee.org/sites/default/files/pdfs/b2201.pdf>

<sup>28</sup> <https://www.energy.gov/energysaver/geothermal-heat-pumps>

<sup>29</sup> <https://www.vox.com/energy-and-environment/2020/10/21/21515461/renewable-energy-geothermal-egs-ags-supercritical>

<sup>30</sup> <https://dandelionenergy.com/>

<sup>31</sup> <https://darcysolutions.com/>

#### **D. Collaboration between Focus on Energy and Utility Demand Response Programs: Alternative 1**

**Alternative 1, “collaborating with utilities to develop a clear demand response program framework”, is the best alternative to ensure Wisconsinites have accessible, effective demand response programming.** Demand response is an effective tool for reducing state energy demand, customer utility bills, and negative health and climate outcomes. Demand response will complement Focus’ beneficial electrification and energy efficiency offerings to manage grid impacts. To implement Alternative 1 effectively, Focus on Energy should emphasize the importance of demand response for electric vehicle charging, electric water heating, and electric space heating. These technologies can be designed to be flexible and therefore gain significant value from demand response efforts.<sup>32</sup> As a state-wide program, Focus on Energy’s role can include ensuring customers are aware of utility demand response programs when accessing appliances capable of leveraging demand response. The program can also ensure all eligible appliances are installed with demand response settings that customers can choose to opt-out of.

#### **E. Affordability and Income-Qualified Programs: Alternative 2, Sub-Alternative A**

**Focus’ income-qualified (IQ) programs will be most impactful if the Commission improves IQ offerings and collaborates with the Department of Administration (DOA) to fill potential gaps (Alternative 2).** Currently, many low-income Wisconsinites face high energy burdens and live in unhealthy housing. According to a UW Madison LaFollette report prepared for the PSC, 70% of Wisconsin households living under the federal poverty line (FPL) experience a “high” energy burden.<sup>33</sup> Households with high energy burdens often don’t have the time or resources to invest in their home leading to unhealthy living conditions such as poor indoor air quality and unsafe indoor temperatures during extreme weather events.<sup>34</sup> These results clearly illustrate that IQ residents need programs that address customer most pressing housing issues and are easy to access.

Despite the need for services, IQ families often can’t take advantage of program offerings. Accessing retrofit services can be difficult for these residents because existing programs don’t comprehensively address customers’ most pressing housing issues, such as health and safety concerns, and the programs can be difficult to navigate. Tackling these barriers can address the low program participation and high retrofit deferrals rates for IQ residents outlined in the Quad memo. Failure to address these barriers creates a problematic equity concern because IQ customers are not receiving fair benefits despite paying into the system. A partnership with the DOA will benefit Focus because it can leverage additional program offerings that meet customer needs and prevent retrofit deferrals while leveraging DOA’s customer acquisition expertise making offerings more accessible to IQ participants. Other programs, like Philadelphia’s Built to Last Program and California’s Low-Income Weatherization Program, have successfully addressed similar issues by delivering whole-home retrofits with a one-stop-shop implementation model. In collaboration with the DOA, Focus can:

- **Ensure IQ Wisconsinites have access to Whole-Home retrofits.** To address IQ housing’s most pressing needs and prevent retrofit deferrals, Focus can take a more wholistic view of offerings and

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<sup>32</sup> <https://www1.eere.energy.gov/buildings/pdfs/75470.pdf>

<sup>33</sup> Researchers commonly define an energy burden of 6% above average as the threshold for “high” energy burden. [https://lafollette.wisc.edu/images/publications/workshops/2021\\_PSC\\_Energy\\_report.pdf](https://lafollette.wisc.edu/images/publications/workshops/2021_PSC_Energy_report.pdf)

<sup>34</sup> <https://rmi.org/insight/decarbonizing-homes/>

provide “Whole-Home” retrofits. These retrofits include Health and Safety, Weatherization and Energy Efficiency (EE), Appliance Electrification, and Energy Assistance. Expanding the current services available to IQ customers by partnering with the DOA will help increase customer participation cost-effectively. Through this partnership, Focus can identify and address gaps to providing “Whole-Home” retrofits, while leveraging existing resources provided by the DOA to address these concerns. This collaboration will help deliver both energy and non-energy benefits at the individual and community level, reduce deferrals, and address the immediate housing concerns of customers.

- **Develop a One-Stop-Shop retrofit program to make IQ programming more accessible.** Currently, participants are navigating multiple retrofit programs to access the funding needed to invest in their home which is time consuming and difficult. If Wisconsinites do not navigate these programs correctly, they can be left deferred with no resources to make the necessary home improvements. Focus on Energy can more efficiently and effectively deliver Whole-Home retrofits by collaborating with the DOA to develop a “One-Stop-Shop” program that consolidates state resources, services, and funding. Focus on Energy and the DOA can consolidate resources and funding to ensure low-income residents can identify their housing needs with technical assistance, connect with a qualified contractor, and access state retrofit funding. Collaboration with the DOA will ensure existing funding and services can go farther and be more effective than the current system allows.

To implement Alternative 2 and effectively collaborate with the DOA, the Commission should consider the following suggestions to help guide the partnership:

1. **Align on IQ programming priorities with the DOA.** To ensure effective collaboration, Focus on Energy should develop joint priorities with the DOA. These priorities should aim to reduce barriers for IQ Wisconsinites to access Whole-Home retrofits.
2. **Collaborate and stack funding with the DOA to ensure Whole-Home retrofits are available.** Collaboration with the DOA should aim to stack funding and resources for Whole-Home retrofits. For additional funding, these organizations should look to relevant federal state funding. This can include federal housing grants, health-care funding, utility programs, etc.<sup>35</sup>
3. **Collaborate with the DOA to unify access to retrofits by developing a “One-Stop-Shop” program.** Unifying resources to deliver retrofits in a “One-Stop-Shop” program reduces financial and program accessibility barriers many Wisconsinites currently face. The DOA and Focus are best poised to begin this program development because they already have the program infrastructure and funding to pursue a one-stop-shop.
4. **Develop Multi-Family Programming.** Renters have struggled to access Focus on Energy in multifamily housing because the tenants who pay utilities and benefit from efficiency interventions don’t have decision making power to pursue or invest in energy efficient infrastructure improvements. Owners have little incentive to invest in energy reduction interventions because they don’t reap the monetary benefit for their investment. Focus on Energy needs to address how it will ensure renters benefit from their contribution to the Focus program. Potential solutions include launching multi-family pilots or developing a multi-family program targeted at benefiting renters within Focus on Energy. Having a separate program will allow implementers to develop unique strategies tailored to increasing participating in this customer class.

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<sup>35</sup> <https://www.aceee.org/research-report/h2002>



5. **Ensure IQ Focus incentives are instant:** Income-Qualified participants may struggle to afford an appliance upgrade through the program's current offerings if they don't receive the rebate at the time of purchase. Providing instant rebates makes Focus offerings more accessible.

**While DOA collaboration will support increased participation for IQ customers, Focus on Energy should continue to ensure their programs are meeting the needs of these residents by selecting Sub-alternative A.** Convening a stakeholder group to develop solutions for program barriers is an effective solution for continuous community engagement, informed decision making and problem solving around program barriers. When developing this working group, the PSC should clearly outline the priorities, staffing requirements, and timeline for the working group. The Commissioners should also outline how this working group's recommendations will lead to decision-making.

**Conclusion:** Aligning Focus on Energy's investment priorities with the Governor's carbon reduction goals, prioritizing efficient electric heat pumps alongside demand response, and eliminating barriers to access for LMI and rural customers, will allow the Commission to develop a climate-aligned program while fulfilling its statutory responsibilities under Wisconsin's Energy Priorities Law and Focus on Energy Statute.

Sincerely,

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